

Attorney's Matter No. 5673-53922

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Art Unit: Unknown

Baldwin et al.

CERTIFICATE OF MAILING

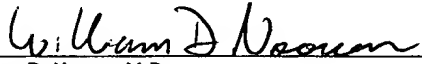
Application No.: 09/445,788

I hereby certify that this paper and the documents referred to as being attached or enclosed herewith are being deposited with the United States Postal Service on March 8, 2000, as Express Mail, Label No. EL121363564US, addressed to: BOX PCT, ASSISTANT COMMISSIONER FOR PATENTS, WASHINGTON D.C. 20231.

Filed: January 6, 2000

For: LIVE ATTENUATED VACCINES

Examiner: Unknown

  
William D. Noonan, M.D.  
Attorney for Applicant

Date: March 8, 2000

TRANSMITTAL LETTER

TO THE ASSISTANT COMMISSIONER FOR PATENTS  
Washington, DC 20231


Enclosed for filing in the application referenced above are the following:

- ☒ Copy of Notification of Missing Requirements Under 35 U.S.C. § 371 in the United States Designated/Elected Office (DO/EO/US)
- ☒ Response to Notice with Exhibits A and B
- ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit over-payment, to Account No. 02-4550. A copy of this sheet is enclosed.
- ☒ Please return the enclosed postcard to confirm that the items listed above have been received.

Respectfully submitted,

KLARQUIST SPARKMAN CAMPBELL  
LEIGH & WHINSTON, LLP

By

  
William D. Noonan, M.D.  
Registration No. 30,878

One World Trade Center, Suite 1600  
121 S.W. Salmon Street  
Portland, Oregon 97204  
Telephone: (503) 226-7391  
Facsimile: (503) 228-9446

Attorney's Matter No. 5673-53922

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Baldwin et al.

Application No.: 09/445,788

Filed: January 6, 2000

For: LIVE ATTENUATED VACCINES

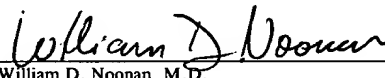
Examiner: Unknown

Date: March 8, 2000

Art Unit: Unknown

CERTIFICATE OF MAILING

I hereby certify that this paper and the documents referred to as being attached or enclosed herewith are being deposited with the United States Postal Service on March 8, 2000, as Express Mail, Label No. EL121363564US, addressed to: BOX PCT, ASSISTANT COMMISSIONER FOR PATENTS, WASHINGTON D.C. 20231.

  
William D. Noonan, M.D.  
Attorney for Applicant

RESPONSE TO NOTIFICATION OF MISSING REQUIREMENTS

TO THE ASSISTANT COMMISSIONER FOR PATENTS  
Washington, DC 20231

In a Notification of Missing Requirements, the notification stated that the executed Declaration had not yet been received. In response, applicants hereby submit this statement.

Attached as Exhibit A is the Completion of Filing Requirements for International Application Entering National State in U.S. Designated Office (DO/US) Under 35 U.S.C. § 371, which was submitted to the U.S. Patent and Trademark Office on January 6, 2000. The executed Declaration is part of this exhibit. Attached as Exhibit B is a copy of the postcard from the U.S. Patent and Trademark PCT office, confirming receipt of the Declaration on January 6, 2000. It should be noted that the Express Mail No. EL307981368US on the post card receipt for the Declaration is identical to the Express Mail No. on the attached Exhibit A.

Applicants submit that the filing requirements for the above-referenced application were completed as of January 6, 2000, and respectfully request that the Patent and Trademark Office acknowledge completion of the filing requirements under § 371 as of January 6, 2000.

Respectfully submitted,

KLARQUIST SPARKMAN CAMPBELL  
LEIGH & WHINSTON, LLP

By William D. Noonan  
William D. Noonan, M.D.  
Registration No. 30,878

One World Trade Center, Suite 1600  
121 S.W. Salmon Street  
Portland, Oregon 97204  
Telephone: (503) 226-7391  
Facsimile: (503) 228-9446



FORM PTO-1370 (REV. 1-98) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE <b>TRANSMITTAL LETTER TO THE UNITED STATES          DESIGNATED/ELECTED OFFICE (DO/EO/US)          CONCERNING A FILING UNDER 35 U.S.C. 371</b>		ATTORNEY'S DOCKET NUMBER 5673-53922 U.S. APPLICATION NO. (If known, use 37 CFR 1.3) Not yet assigned
INTERNATIONAL APPLICATION NO. PCT/GB98/01683	INTERNATIONAL FILING DATE June 6, 1998	PRIORITY DATE CLAIMED June 6, 1997
TITLE OF INVENTION LIVE ATTENUATED VACCINES		
APPLICANT(S) FOR DO/EO/US Thomas John Baldwin, Saverio Peter Borriello, Helen Mary Palmer		
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:		
1. <input checked="" type="checkbox"/> This is a FIRST submission of items concerning a filing under 35 U.S.C. 371. 2. <input type="checkbox"/> This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371. 3. <input checked="" type="checkbox"/> This express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1). 4. <input checked="" type="checkbox"/> A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date. 5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2)) a. <input checked="" type="checkbox"/> is transmitted herewith (required only if not transmitted by the International Bureau). b. <input type="checkbox"/> has been transmitted by the International Bureau. c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US). 6. <input type="checkbox"/> A translation of the International Application into English (35 U.S.C. 371(c)(2)). 7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) a. <input type="checkbox"/> are transmitted herewith (required only if not transmitted by the International Bureau). b. <input type="checkbox"/> have been transmitted by the International Bureau. c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. d. <input checked="" type="checkbox"/> have not been made and will not be made. 8. <input type="checkbox"/> A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). 9. <input checked="" type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). (unsigned) 10. <input type="checkbox"/> A translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).		
Items 11. to 16. below concern document(s) or information included:		
11. <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98. 12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 13. <input checked="" type="checkbox"/> A FIRST preliminary amendment. <input type="checkbox"/> A SECOND or SUBSEQUENT preliminary amendment. 14. <input type="checkbox"/> A substitute specification. 15. <input type="checkbox"/> A change of power of attorney and/or address letter. 16. <input checked="" type="checkbox"/> Other items or information: [ ] Written Opinion [X] Preliminary Examination Report [X] International Search Report [ ] Copies of references cited		

EL307981385US

Practitioner's Docket No. 5673-53922/WDN**IN THE UNITED STATES DESIGNATED OFFICE (DO/US)**

<u>PCT/GB98/01683</u>	<u>June 6, 1998</u>	<u>June 6, 1997</u>
INTERNATIONAL APPLICATION NO.	INTERNATIONAL FILING DATE	PRIORITY DATE CLAIMED
<u>LIVE ATTENUATED VACCINES</u>		
TITLE OF INVENTION		
<u>Thomas John Baldwin, Saverio Peter Borriello, Helen Mary Palmer</u>		
APPLICANT(S) FOR DO/US		

Box PCT  
Assistant Commissioner for Patents  
Washington, D.C. 20231  
ATTENTION: DO/US

**COMPLETION OF FILING REQUIREMENTS  
FOR INTERNATIONAL APPLICATION ENTERING NATIONAL  
STAGE IN U.S. DESIGNATED OFFICE (DO/US) UNDER 35 U.S.C. § 371**

*(check and complete the following item, if applicable)*

- ☐ This replies to the Notice of Missing Requirements under 35 U.S.C. § 371 and 37 C.F.R. § 1.494 (FORM PCT/DO/EO/905).
- ☐ A copy of FORM PCT/DO/EO/905 accompanies this response.

**CERTIFICATION UNDER 37 C.F.R. § 1.10\***

*(Express Mail label number is mandatory.)*

*(Express Mail certification is optional.)*

I hereby certify that this Completion of Filing Requirements and the papers indicated as being transmitted therewith is being deposited with the United States Postal Service on this date January 6, 2000, in an envelope as "Express Mail Post Office to Addressee" Mailing Label Number EL307981368US addressed to the: Assistant Commissioner for Patents, Washington, D.C. 20231.

William D. Noonan, M.D.

*(type or print name of person mailing paper)*

William D. Noonan

Signature of person mailing paper

**WARNING:** Certificate of mailing (first class) or facsimile transmission procedures of 37 C.F.R. § 1.8 cannot be used to obtain a date of mailing or transmission for this correspondence.

**\*WARNING:** Each paper or fee filed by "Express Mail" **must** have the number of the "Express Mail" mailing label placed thereon prior to mailing. 37 C.F.R. § 1.10(b).

"Since the filing of correspondence under § 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will **not** be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442.

(Completion of Filing Requirements for International Application Entering National Stage in Designated Office (DO/US) under 35 U.S.C. § 371 [13-8]—page

EL307981368US

EXHIBIT

A

**WARNING:** Where the items being submitted to complete the entry of the international application into the national phase are subsequent to 20 months from the priority date, the application is still considered to be in the international stage. If mailing procedures are utilized to obtain a date, the express mail procedure of 37 C.F.R. § 1.10 must be used (because international application papers are not covered by an ordinary certificate of mailing. 37 C.F.R. § 1.8(2)(d)).

**NOTE:** Documents and fees must be clearly identified as a submission to enter the national stage under 35 U.S.C. § 371. Otherwise, the submission will be considered as being made under 35 U.S.C. § 111. 37 C.F.R. § 1.494(f).

## DECLARATION OR OATH

- I. ☒ No original declaration or oath was filed. Enclosed is the original declaration or oath for this application.

**NOTE:** For surcharge fee for filing declaration after filing date, complete item IV(2).

**NOTE:** Acceptable minimums in the declaration in an ordinarily filed U.S. application for identification of the specification to which it applies are:

(A) application number (consisting of the series code and the serial number, e.g., 08/123,456);

(B) serial number and filing date;

(C) attorney docket number which was on the specification as filed;

(D) title which was on the specification as filed and reference to an attached specification which is both attached to the oath or declaration at the time of execution and submitted with the oath or declaration; or

(E) title which was on the specification as filed and accompanied by a cover letter accurately identifying the application for which it was intended by either the application number (consisting of the series code and the serial number, e.g., 08/123,456), or serial number and filing date. Absent any statement(s) to the contrary, it will be presumed that the application filed in the PTO is the application which the inventor(s) executed by signing the oath or declaration.

M.P.E.P. § 601.01(a), 7th ed. Notice of September 12, 1983 (1035 O.G. 3). See M.P.E.P. § 601.01(a), 7th ed.

**NOTE:** Another minimum found acceptable in the declaration is the filing date (i.e., date of express mail) and the express mail number, useful where the serial number is not yet known. But note the practice where the express mail deposit is a Saturday, Sunday or holiday within the District of Columbia. 37 C.F.R. § 1.10(c).

**NOTE:** 37 C.F.R. § 1.41(a) points out that "Full names must be stated, including the family name and at least one given name without abbreviation together with any other given name or initial."

(complete (a) or (b), if applicable)

Attached is a

- (a) ☒ Statement by a registered attorney that the application filed in the PTO is the application that the inventor executed by signing the declaration.
- (b) ☐ Statement that the "attached" specification is a copy of the specification and any amendments thereto that were filed in the PTO to obtain the filing date.

## AMENDMENT

II. (complete as applicable)

☐ An amendment in accordance with 37 C.F.R. § 1.121 is attached.

☐ The attached amendment cancels claims \_\_\_\_\_ inclusively.

(Completion of Filing Requirements for International Application Entering National Stage in Designated Office (DO/US) under 35 U.S.C. § 371 [13-8]—page 2 of 6)

**TRANSMITTAL OF ENGLISH TRANSLATION  
OF NON-ENGLISH LANGUAGE PAPERS**

III. ☐ Submitted herewith, is an English translation of the non-English language international application papers as originally filed. It is requested that this translation be used as the copy for examination purposes in the PTO. (See 37 C.F.R. § 1.494(b)(2)).

NOTE: For fee for processing a non-English application, and submission of an English translation later than 20 months after the priority date, complete item IV(3) below.

NOTE: A non-English oath or declaration in the form provided or approved by the PTO need not be translated. 37 C.F.R. § 1.69(b).

**FEES****IV.**

NOTE: See 37 C.F.R. § 1.28(a).

**1. Fees for claims**

- ☐ Each independent claim in excess of 3  
(37 C.F.R. § 1.492(b)—\$78.00; small entity—\$39.00) \$ \_\_\_\_\_
- ☐ Each claim in excess of 20  
(37 C.F.R. § 1.492(c)—\$18.00; small entity—\$9.00) \$ \_\_\_\_\_
- ☐ Multiple dependent claim(s)  
(37 C.F.R. § 1.492(d)—\$260.00;  
small entity—\$130.00) \$ \_\_\_\_\_

**2. Surcharge fees**

- ☐ Surcharge set forth in § 1.492(e), for accepting the declaration later than 20 months after the priority date in filing an application in the U.S. as a designated office—\$130.00; small entity—\$65.00 \$ \_\_\_\_\_

NOTE: The processing fee in the next item (Number 3) below is not subject to a reduction for small entity status.

**3.**

- ☐ Processing fee set forth in § 1.492(f), for acceptance of an English translation later than 20 months after the priority date—\$130.00 \$ \_\_\_\_\_

Total fees \$ \_\_\_\_\_



### SMALL ENTITY STATUS

V. ☐ A statement that this filing is by a small entity

NOTE: See 37 C.F.R. § 1.28(a).

(check and complete applicable items)

- a. ☐ is attached.  
☐ was filed on \_\_\_\_\_ (original).  
b. ☐ A separate refund request accompanies this paper.

### EXTENSION OF TIME

(complete (a) or (b), as applicable)

#### VI.

The proceedings herein are for a patent application. The provisions of 37 C.F.R. § 1.136(a) apply.

(a) ☐ Applicant petitions for an extension of time, the fees for which are set out in 37 C.F.R. § 1.17(a)(1)-(4), for the total number of months checked out below

<input type="checkbox"/> one month	\$ 110.00	\$ 55.00
<input type="checkbox"/> two months	\$ 380.00	\$ 190.00
<input type="checkbox"/> three months	\$ 870.00	\$ 435.00
<input type="checkbox"/> four months	\$ 1,360.00	\$ 680.00

Fee: \$ \_\_\_\_\_

If an additional extension of time is required, please consider this a petition therefore.

(check and complete the next item, if applicable)

- ☐ An extension for \_\_\_\_\_ months has already been secured. The fee paid therefor of \$ \_\_\_\_\_ is deducted from the total fee due for the total months of extension now requested.

Extension fee due with this request \$ \_\_\_\_\_

or

- (b) ☒ Applicant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

### TOTAL FEE DUE

VII. The total fee due is:

Completion fee(s) \$ \_\_\_\_\_ 0.00

Extension fee (if any) \$ \_\_\_\_\_ 0.00

TOTAL FEE DUE \$ \_\_\_\_\_ 0.00

(Completion of Filing Requirements for International Application Entering National Stage in Designated Office (DO/US) under 35 U.S.C. § 371 [13-8]—page 4 of 6)

**PAYMENT OF FEES****VIII.**

- ☐ Enclosed is a check in the amount of \$ \_\_\_\_\_
- ☐ Charge Account No. \_\_\_\_\_ in the amount of \$ \_\_\_\_\_

A duplicate of this request is attached.

**NOTE:** Fees should be itemized in such a manner that it is clear for which purpose the fees are paid. 37 C.F.R. § 1.22(b).

**AUTHORIZATION TO CHARGE ADDITIONAL FEES****IX.**

**WARNING:** Accurately count claims, especially multiple dependant claims, to avoid unexpected high charges if extra claims are authorized.

**NOTE:** "A written request may be submitted in an application that is an authorization to treat any concurrent or future reply, requiring a petition for an extension of time under this paragraph for its timely submission, as incorporating a petition for extension of time for the appropriate length of time. An authorization to charge all required fees, fees under § 1.17, or all required extension of time fees will be treated as a constructive petition for an extension of time in any concurrent or future reply requiring a petition for an extension of time under this paragraph for its timely submission. Submission of the fee set forth in § 1.17(a) will also be treated as a constructive petition for an extension of time in any concurrent reply requiring a petition for an extension of time under this paragraph for its timely submission." 37 C.F.R. § 1.136(a)(3).

**NOTE:** "Amounts of twenty-five dollars or less will not be returned unless specifically requested within a reasonable time, nor will the payer be notified of such amounts; amounts over twenty-five dollars may be returned by check or, if requested, by credit to a deposit account." 37 C.F.R. § 1.26(a).

- ☐ The Commissioner is hereby authorized to charge the following additional fees that may be required by this paper, and during the entire pendency of this application, to Account No. 02-4550

- ☐ 37 C.F.R. §§ 1.492(a)(2), 1.492(a)(3), or 1.492(a)(5) (filing fees)
- ☐ 37 C.F.R. § 1.492(b) (presentation of extra claims)

**NOTE:** Because additional fees for excess or multiple dependent claims not paid on filing, or on later presentation, must only be paid, or these claims cancelled by amendment prior to the expiration of the time period set for response by the PTO in any notice of fee deficiency (37 C.F.R. § 1.16(d)), it might be best not to authorize the PTO to charge additional claim fees, except possibly when dealing with amendments after final action.

- ☐ 37 C.F.R. § 1.17 (application processing fees)
- ☐ 37 C.F.R. § 1.17(a)(1)-(5) (extension fees pursuant to § 1.136(a)).

**WARNING:** While 37 C.F.R. § 1.17(a), (b), (c) and (d) deal with extensions of time under § 1.136(a), this authorization should be made only with the knowledge that: "Submission of the appropriate extension fee under 37 C.F.R. § 1.136(a) is to no avail unless a request or petition for extension is filed." (Emphasis added). Notice of November 5, 1985 (1060 O.G. 27).

- ☐ 37 C.F.R. § 1.18 (issue fee at or before mailing of Notice of Allowance, pursuant to 37 C.F.R. § 1.311(b)).

**NOTE:** Where an authorization to charge the issue fee to a deposit account has been filed before the mailing of a Notice of Allowance, the issue fee will be automatically charged to the deposit account at the time of mailing the notice of allowance. 37 C.F.R. § 1.311(b).

**NOTE:** 37 C.F.R. § 1.28(b) requires "Notification of any change in loss of entitlement to small entity status must be filed in the application . . . prior to paying, or at the time of paying . . . issue fee." From the wording of 37 C.F.R. § 1.28(b): (a) notification of change of status must be made even if the fee is paid as "other than a small entity" and (b) no notification is required if the change is to another small entity.

(Completion of Filing Requirements for International Application Entering National Stage in Designated Office (DOJUS) under 35 U.S.C. § 371 [13-8]—page 5 of 6)

- ☐ 37 C.F.R. § 1.492(e) and (f) (surcharge fees for filing the declaration and/or an English translation of an international application later than 20 months from the earliest claimed priority date)

**WARNING:** *It is suggested that you always check this last authorization.*

- [X] Please return the enclosed postcard to confirm that the items listed above have been received.

*William D. Noonan*

**SIGNATURE OF PRACTITIONER**

Reg. No. 30,878

William D. Noonan, M.D.

*(type or print name of practitioner)*

Tel. No.: (503) 226-7391

Klarquist Sparkman Campbell  
Leigh & Whinston, LLP

Customer No.:

**Address**

One World Trade Center  
121 S.W. Salmon Street, Suite 1600  
Portland, OR 97204

(Completion of Filing Requirements for International Application Entering National Stage in Designated Office  
(DO/US) under 35 U.S.C. § 371 [13-8]—page 6 of 6)

## COMBINED DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled LIVE ATTENUATED VACCINES, the specification of which

- ☐ is attached hereto.
- ☐ was filed on \_\_\_\_\_ as Application No. \_\_\_\_\_.
- ☒ was described and claimed in PCT International Application No. PCT/GB98/01683, filed on 9 June 1998, and as amended under PCT Article 19 on \_\_\_\_\_ (if applicable).
- ☐ and was amended on \_\_\_\_\_ (if applicable).
- ☐ with amendments through \_\_\_\_\_ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56. If this is a continuation-in-part application filed under the conditions specified in 35 U.S.C. § 120 which discloses and claims subject matter in addition to that disclosed in the prior copending application, I further acknowledge the duty to disclose material information as defined in 37 CFR § 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under Title 35, United States Code, § 119(a)-(d) of any foreign application(s) for patent or inventor's certificate or of any PCT International application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT International application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) on which priority is claimed:

Prior Foreign Application(s)			Priority Claimed	
<u>9711964.8</u>	<u>Great Britain</u>	<u>9 June 1997</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(Number)	(Country)	(Day/Month/Year Filed)	Yes	No

I hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below:

_____	_____
Application Number	Filing Date

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) or § 365(c) of any PCT International application(s) designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United

States Code, § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56(a) which occurred between the filing date of the prior application and the national or PCT International filing date of this application:

<u>PCT/GB98/01683</u>	<u>9 June 1998</u>	<u>Published and Pending</u>
(Application No.)	(Filing Date)	(Status: patented, Pending, abandoned)

The undersigned hereby authorizes the U.S. attorney or agent named herein to accept and follow instructions from Cantab Pharmaceuticals Research Limited as to any action to be taken in the Patent and Trademark Office regarding this application without direct communication between the U.S. attorney or agent and the undersigned. In the event of a change in the persons from whom instructions may be taken, the U.S. attorney or agent named herein will be so notified by the undersigned.

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application, to file a corresponding international application, and to transact all business in the Patent and Trademark Office connected therewith:

Name	Reg. No.	Name	Reg. No.
BECKER, Mark L.	31,325	NOONAN, William D.	30,878
CALDWELL, Lisa M.	41,653	PETERSEN, David P.	28,106
DeGRANDIS, Paula A.	43,581	POLLEY, Richard J.	28,107
GEORGE, Samuel E.	44,119	SCOTTI, Robert F.	39,830
GIRARD, Michael P.	38,467	SIEGEL, Susan Alpert	43,121
JAKUBEK, Joseph T.	34,190	SLATER, Stacey C.	36,011
JOHNSON, Michelle L.	36,352	STEPHENS JR., Donald L.	34,022
JONES, Michael D.	41,879	STUART, John W.	24,540
KLARQUIST, Kenneth S.	16,445	VANDENBERG, John D.	31,312
KLITZKE II, Ramon A.	30,188	WHINSTON, Arthur L.	19,155
HARDING, Tanya M.	42,630	WIGHT, Stephen A.	37,759
LEIGH, James S.	20,434	WINN, Garth A.	33,220
MAURER, Gregory L.	43,781		

Address all telephone calls to William D. Noonan, M.D. at telephone number (503) 226-7391.

Address all correspondence to:

KLARQUIST SPARKMAN CAMPBELL  
LEIGH & WHINSTON, LLP  
One World Trade Center, Suite 1600  
121 S.W. Salmon Street  
Portland, OR 97204-2988

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of Sole or first Inventor: Thomas John Baldwin

Inventor's Signature

X T.J. Baldwin X

X 10/12/99 X  
Date

Residence: Great Britain

Citizenship: United Kingdom

Post Office Address:

X 65 TRENT BOULEVARD, WEST BRIDGFORD  
NOTTINGHAM. NG2 5BE. X

T.J. Baldwin  
10/12/99

Full Name of Second Joint Inventor, if any: Saverio Peter Borriello

Inventor's Signature

\_\_\_\_\_

\_\_\_\_\_ Date

Residence: Great Britain

Citizenship: United Kingdom

Post Office Address:

Full Name of Third Joint Inventor, if any: Helen Mary Palmer

Inventor's Signature

\_\_\_\_\_

\_\_\_\_\_ Date

Residence: Great Britain

Citizenship: United Kingdom

Post Office Address:

## COMBINED DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled LIVE ATTENUATED VACCINES, the specification of which

- ☐ is attached hereto.
- ☐ was filed on \_\_\_\_\_ as Application No. \_\_\_\_\_.
- ☒ was described and claimed in PCT International Application No. PCT/GB98/01683, filed on 9 June 1998, and as amended under PCT Article 19 on \_\_\_\_\_ (if applicable).
- ☐ and was amended on \_\_\_\_\_ (if applicable).
- ☐ with amendments through \_\_\_\_\_ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56. If this is a continuation-in-part application filed under the conditions specified in 35 U.S.C. § 120 which discloses and claims subject matter in addition to that disclosed in the prior copending application, I further acknowledge the duty to disclose material information as defined in 37 CFR § 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under Title 35, United States Code, § 119(a)-(d) of any foreign application(s) for patent or inventor's certificate or of any PCT International application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT International application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) on which priority is claimed:

Prior Foreign Application(s)			Priority Claimed	
<u>9711964.8</u>	<u>Great Britain</u>	<u>9 June 1997</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(Number)	(Country)	(Day/Month/Year Filed)	Yes	No

I hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below:

\_\_\_\_\_  
Application Number

\_\_\_\_\_  
Filing Date

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States Code, § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56(a) which occurred between the filing date of the prior application and the national or PCT International filing date of this application:

<u>PCT/GB98/01683</u>	<u>9 June 1998</u>	<u>Published and Pending</u>
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Name	Reg. No.	Name	Reg. No.
BECKER, Mark L.	31,325	NOONAN, William D.	30,878
CALDWELL, Lisa M.	41,653	PETERSEN, David P.	28,106
DeGRANDIS, Paula A.	43,581	POLLEY, Richard J.	28,107
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LEIGH & WHINSTON, LLP  
One World Trade Center, Suite 1600  
121 S.W. Salmon Street  
Portland, OR 97204-2988

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Full Name of Sole or first Inventor: Thomas John Baldwin

Inventor's Signature \_\_\_\_\_

\_\_\_\_\_  
Date

Residence: Great Britain

Citizenship: United Kingdom

Post Office Address:

Full Name of Second Joint Inventor, if any: Saverio Peter Borriello

Inventor's Signature

X *S.P. Borriello* X

X *22/12/99* X  
Date

Residence: Great Britain

Citizenship: United Kingdom

Post Office Address:

*25 Belton Lane, Grantham  
Lincs. NG31 9HJ UK*

sign + date  
for address-only  
*S.P. Borriello*  
*22/12/99*

Full Name of Third Joint Inventor, if any: Helen Mary Palmer

Inventor's Signature \_\_\_\_\_

\_\_\_\_\_  
Date

Residence: Great Britain

Citizenship: United Kingdom

Post Office Address:

## COMBINED DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled LIVE ATTENUATED VACCINES, the specification of which

☐ is attached hereto.

☐ was filed on \_\_\_\_\_ as Application No. \_\_\_\_\_.

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Inventor's Signature \_\_\_\_\_

\_\_\_\_\_  
Date

Residence: Great Britain

Citizenship: United Kingdom

Post Office Address:

Full Name of Second Joint Inventor, if any: Saverio Peter Borriello

Inventor's Signature \_\_\_\_\_

\_\_\_\_\_  
Date

Residence: Great Britain

Citizenship: United Kingdom

Post Office Address:

Full Name of Third Joint Inventor, if any: Helen Mary Palmer

Inventor's Signature

X Helen M Palmer X

X 16.12.99 X

\_\_\_\_\_  
Date

Residence: Great Britain

Citizenship: United Kingdom

Post Office Address:

3 ROOKERY ROAD  
KNOWLE  
BRISTOL BS4 2DS

Sign & date again  
please  
Helen M Palmer  
16.12.99

UNITED STATES of AMERICA -- PATENT APPLICATION

=====

ASSIGNMENT by Joint Inventors

=====

THIS AGREEMENT AND ASSIGNMENT is made BETWEEN:

[1] (Dr) ..Thomas John BALDWIN.....

of .....

[2] (Prof) ..Saverio Peter BORRIELLO.....

of .....

[3] (Dr) ..Helen Mary PALMER.....

of .....

(hereinafter referred to as 'Assignors') of the one part:

AND

The MEDICAL RESEARCH COUNCIL, a corporation organized under the laws of the United Kingdom, of 20 Park Crescent, London W1N 4AL, UK;

(hereinafter referred to as 'Assignee') of the other part:

WHEREAS

A: Said Assignors are (together and to the exclusion of all others) joint inventors and joint applicants of an Application for Letters Patent of the United States of America identified as follows:

No: (USPTO phase (35 USC 371) of) PCT GB 98 01683 filed 9 June 1998

For: .... Live Attenuated Vaccines ..... ; (hereinafter referred to as 'Patent Application'):

B: Said Assignors desire to make and said Assignee desires to receive an assignment of the entire right and title in and to said Patent Application and the invention disclosed therein:

NOW THEREFORE by this AGREEMENT and ASSIGNMENT it is hereby WITNESSED as follows, THAT:

1: In consideration of the sum of Ten Dollars (\$10.00) and other good and valuable consideration paid to said Assignors by said Assignee, receipt whereof is hereby acknowledged, said Assignors do hereby assign, sell, transfer and set over unto said Assignee absolutely the entire benefit of said Patent Application and the invention disclosed

therein, including the entire right title and interest in to and under the same and all rights powers liberties and immunities arising or to arise therefrom and from any and all continuations and continuations-in-part thereof and from any and all Letters Patent which may be granted thereon and any reissue or reissues of such Letters Patent, the same to be held and enjoyed by said Assignee, for its own use and behoof and for the use and behoof of its successors, assigns or other legal representatives, to the end of the full term or terms for which Letters Patent of the United States are or may be granted or reissued, as fully and entirely as the same would or could have been held and enjoyed by the said Assignors if this assignment and sale had not been made; together with any and all claims for damages by reason of past infringement of said Letters Patent, with the right to sue for, and collect the same for its own use and behoof, and for the use and behoof of its successors, assigns and other legal representatives:

2: Said Assignors and each of them hereby undertake (at the expense of said Assignee) to do all acts and execute all documents necessary or desirable for further assuring the title of said Assignee to said Patent Application:

3: Said Assignors and each of them hereby assure warrant and covenant with said Assignee that they are lawfully entitled to assign and transfer the entire interest herein assigned, and that they have not executed, and will not execute, any instrument in conflict herewith:

Done and witnessed by the hands of the abovenamed Assignors in the presence of the below-named witnesses:

[1] T. J. Baldwin date 22/12/99  
(Dr) Thomas J. Baldwin In the presence of [witness]  
TC Stancliffe [signature]  
at [place] CAMBRIDGE TC STANCLIFFE [name]  
31 Loys Rd CAMBRIDGE [address]  
CB4 2AR

[2] \_\_\_\_\_ date \_\_\_\_\_  
(Dr) ..... In the presence of [witness]  
\_\_\_\_\_ [signature]  
at [place] \_\_\_\_\_ [name]  
\_\_\_\_\_ [address]

[3] <sup>signature</sup> Helen M Palmer X date 16.12.99 X  
(Dr) Helen M Palmer ..... X In the presence of [witness]  
J. P. Leeming [signature]  
at [place] Bristol JOHN P. LEEMING [name]  
10 PINWOOD CLOSE [address]  
BRISTOL BS9 4AJ

UNITED STATES of AMERICA -- PATENT APPLICATION

ASSIGNMENT by Joint Inventors

THIS AGREEMENT AND ASSIGNMENT is made BETWEEN:

[1] (Dr) ..Thomas John BALDWIN.....

of .....

[2] (Prof) ..Saverio Peter BORRIELLO.....

of [Public Health Laboratory Service]

[3] (Dr) ..Helen Mary PALMER.....

of .....

sign + date  
again please  
S.F. Borriello  
22/12/99

(hereinafter referred to as 'Assignors') of the one part:

AND

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Done and witnessed by the hands of the abovenamed Assignors in the presence of the below-named witnesses:

[1] \_\_\_\_\_ date \_\_\_\_\_  
(Dr) ..... In the presence of [witness]  
\_\_\_\_\_ [signature]  
at [place] \_\_\_\_\_ [name]  
\_\_\_\_\_ [address]

[2] X Prof. S. P. Borriello X date X 22/12/99 X  
(Dr) S. P. BORRIELLO. In the presence of [witness]  
\_\_\_\_\_ [signature]  
at [place] X LONDON NW X DRAC MCCARTINE [name]  
\_\_\_\_\_ CPK, 6/ CALINDALE [address]  
\_\_\_\_\_ LONDON NW9 5HT

[3] \_\_\_\_\_ date \_\_\_\_\_  
(Dr) ..... In the presence of [witness]  
\_\_\_\_\_ [signature]  
at [place] \_\_\_\_\_ [name]  
\_\_\_\_\_ [address]



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Baldwin et al.

Art Unit: Unknown

Application No.: Unknown

Filed: December 9, 1999

For: LIVE ATTENUATED VACCINES


Examiner: Unknown

Date: January 6, 2000

Box PCT  
ASSISTANT COMMISSIONER FOR PATENTS  
WASHINGTON, D.C. 20231

**CERTIFICATE OF MAILING**

I hereby certify that this paper and the documents referred to as being attached or enclosed herewith are being deposited with the United States Postal Service on January 6, 2000 as Express Mail, Label No. EL307981368US, addressed to: BOX PCT, ASSISTANT COMMISSIONER FOR PATENTS, WASHINGTON, D.C. 20231.

  
William D. Noonan, M.D.  
Attorney for Applicant

**STATEMENT**

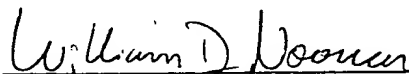
The undersigned registered attorney hereby confirms that the application filed in the U.S. Patent and Trademark Office (PTO) on December 9, 1999, is identical to the application that the inventors have executed by signing the attached declarations. This application, filed in the PTO under § 371 on December 9, 1999, under attorney matter number 5673-53922, by Express Mail, Label No. EL307981385US, is identical to international application no. PCT/GB98/01683, filed June 6, 1998.

The surcharge of \$130.00 for accepting the declaration later than 20 months after the priority date in filing an application in the U.S. as a designated office was paid at the time of filing, namely December 9, 1999, as shown on the attached transmittal letter (Exhibit A).

Therefore, no additional fee or authorization is included in this action.

Respectfully submitted,

KLARQUIST SPARKMAN CAMPBELL  
LEIGH & WHINSTON, LLP

By   
William D. Noonan, M.D.  
Registration No. 30,878

One World Trade Center, Suite 1600  
121 S.W. Salmon Street  
Portland, Oregon 97204  
Telephone: (503) 226-7391  
Facsimile: (503) 228-9446

ATTORNEY REF. NO. 5673-53922 ATTY/SEC WDN/an  
INVENTOR(S) Baldwin et al.  
TITLE LIVE ATTENUATED VACCINES  
CLIENT NAME Cantab Pharmaceuticals Research Ltd.

The following, mailed on Jan 6, 2000 by Express Mail Label

No. EL307981368US, was received in the U.S. Patent and Trademark Office on the date stamped hereon:

430 Rec'd PCT/PIO 06 JAN 2000

☐ pp. Spec., ☐ pp. Claims, and Abstract ☐ Associate POA  
☒ Combined Declaration/POA or ☐ Oath ☐ Info. Disclosure Statement  
☐ Verified Stmt. Claiming Small Entity Status: ☐ Form PTO-1449/References  
☐ Ind. Inventor ☐ Sm. Bus. Concern ☒ Other Statement +  
☐ Nonprofit Org. ☐ Non-Inventor Exhibit A  
☐ Drawings ☐ Sheet(s) ☐ Formal ☐ Informal ☒ Trans. Ltr. + 1 2 copy(s)  
☐ Certified copy of ☐ Application ☐ Deposit Acct. ☐ Authority  
☐ Assignment to: \_\_\_\_\_  
☐ Check for \$ \_\_\_\_\_ to cover ☐ filing fee and ☐ assignment recordal.

EXHIBIT

B

## COMBINED DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled LIVE ATTENUATED VACCINES, the specification of which

☐ is attached hereto.

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Prior Foreign Application(s)

Priority  
Claimed

9711964.8  
(Number)

Great Britain  
(Country)

9 June 1997  
(Day/Month/Year Filed)

☒ ☐  
Yes No

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WDN/SAS:an 12/8/99 5673-53922

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Full Name of Sole or first Inventor: Thomas John Baldwin

Inventor's Signature \_\_\_\_\_

\_\_\_\_\_  
Date

Residence: Great Britain

Citizenship: United Kingdom

Post Office Address:

Full Name of Second Joint Inventor, if any: Saverio Peter Borriello

Inventor's Signature \_\_\_\_\_

\_\_\_\_\_  
Date

Residence: Great Britain

Citizenship: United Kingdom

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Full Name of Third Joint Inventor, if any: Helen Mary Palmer

Inventor's Signature \_\_\_\_\_

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Date

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